



Date: March 30, 2012
To: Work Assignment Manager: Jeff Catanzarita, EPA/ERTC
From: V. Kansal, Analytical Support Leader, SERAS *Vinod Kansal*
Subject: Preliminary Results of VOCs in Air Analysis using SERAS SOP# 1814
Project: Cabo Rojo, WA# 0-130

This document contains the analytical results and report for the following samples:

Chain(s) of Custody #: 2-032112-171616-0015, 2-032112-174259-0016, 2-032112-175005-0017,
2-032112-175125-0018, 2-032112-175226-0019, 2-032112-175316-0020,
2-032112-175435-0021, 2-032112-175708-0022, 2-032112-175900-0023,
2-032112-180018-0024, 2-032112-180128-0025, 2-032112-180247-0026,
2-032112-180403-0027, 2-032112-180503-0028
Analyses: TO-15
No. of Samples: 68
Matrix: Indoor Air

This report contains the results of 68 indoor air samples received on 03/23/12 for analysis of VOCs in Air by EPA TO-15.

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Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank		0-130-1142		0-130-1172		0-130-1175		0-130-1176	
Sample Location	3/23/2012		Trip Blank		J1-IA1		J2-IA		J2-AMB	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U 0.0767									
1,1-Dichloroethene	U 0.119									
Methylene Chloride	U 0.104		U 0.104		0.540 0.104		0.470 0.104		0.536 0.104	
trans-1,2-Dichloroethene	U 0.119									
1,1-Dichloroethane	U 0.121									
cis-1,2-Dichloroethene	U 0.119									
Chloroform	U 0.146		U 0.146		0.203 0.146		8.31 0.146		U 0.146	
1,2-Dichloroethane	U 0.121									
Benzene	U 0.0958		0.522 0.0958		0.545 0.0958		0.673 0.0958		0.605 0.0958	
Trichloroethene	U 0.161									
Toluene	U 0.113	1.61	0.113		3.51 0.113		3.02 0.113		5.01 0.113	
Tetrachloroethene	U 0.203									
Ethylbenzene	U 0.130		0.139 0.130		0.401 0.130		0.423 0.130		0.529 0.130	
1,2,4-Trimethylbenzene	U 0.147		0.219 0.147		0.764 0.147		0.879 0.147		0.703 0.147	

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1059		0-130-1060		0-130-1062		0-130-1064		0-130-1066	
Sample Location	MHS-IA1		MHS-IA2		MHS-IA3		MHS-IA4		MHS-IA5	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
Methylene Chloride	0.593	0.104	0.659	0.104	0.415	0.104	0.549	0.104	0.418	0.104
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
Chloroform	U	0.146	U	0.146	0.152	0.146	U	0.146	U	0.146
1,2-Dichloroethane	U	0.121	0.140	0.121	U	0.121	U	0.121	U	0.121
Benzene	6.65	0.0958	5.04	0.0958	0.508	0.0958	0.561	0.0958	0.409	0.0958
Trichloroethene	U	0.161								
Toluene	38.8	0.113	36.4	0.113	2.33	0.113	8.18	0.113	2.42	0.113
Tetrachloroethene	U	0.203								
Ethylbenzene	7.65	0.130	5.99	0.130	0.667	0.130	0.681	0.130	0.827	0.130
1,2,4-Trimethylbenzene	7.08	0.147	5.49	0.147	0.687	0.147	0.645	0.147	0.477	0.147

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number 0-130-1160
Sample Location I12-IA

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767
1,1-Dichloroethene	U	0.119
Methylene Chloride	0.543	0.104
trans-1,2-Dichloroethene	U	0.119
1,1-Dichloroethane	U	0.121
cis-1,2-Dichloroethene	U	0.119
Chloroform	1.49	0.146
1,2-Dichloroethane	0.434	0.121
Benzene	0.829	0.0958
Trichloroethene	U	0.161
Toluene	4.43	0.113
Tetrachloroethene	U	0.203
Ethylbenzene	0.698	0.130
1,2,4-Trimethylbenzene	1.13	0.147

Table 1.1 Result of the Analysis for VOC(µg/m³) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1144	0-130-1146	0-130-1148	0-130-1150	0-130-1151			
Sample Location	PFCS-IA1	PFCS-IA2	PFCS-IA3	PFCS-IA4	PFCS-IA5			
Analyte	Results µg/m ³	RL µg/m ³						
Vinyl Chloride	U 0.0767	U 0.0767						
1,1-Dichloroethene	U 0.119	U 0.119						
trans-1,2-Dichloroethene	U 0.119	U 0.119						
1,1-Dichloroethane	U 0.121	U 0.121						
cis-1,2-Dichloroethene	U 0.119	U 0.119						
1,2-Dichloroethane	U 0.121	U 0.121						
Trichloroethene	U 0.161	U 0.161						
Tetrachloroethene	U 0.203	U 0.203	U 0.203	U 0.203	0.241	0.203	U 0.203	U 0.203

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1153	0-130-1155	0-130-1157	0-130-1158	0-130-1162
Sample Location	PFCS-IA6	PFCS-IA7	PFCS-IA8	PFCS-AMB	15CX-IA1

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	0.158	0.119
trans-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.119	1.16	0.119
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	0.177	0.119	U	0.119	U	0.119	U	0.119	1.03	0.119
1,2-Dichloroethane	U	0.121	U	0.121	0.140	0.121	U	0.121	U	0.121
Trichloroethene	U	0.161	U	0.161	U	0.161	U	0.161	0.730	0.161
Tetrachloroethene	U	0.203								

Table 1.1 Result of the Analysis for VOC(µg/m³) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1163	Sample Location	0-130-1165 15CX-IA2	Sample Number	0-130-1167 115ACX-IA	Sample Location	0-130-1169 CX6-IA	Sample Number	0-130-1170 115ACX-AMB		
Analyte	Results µg/m ³	RL µg/m ³	Analyte	Results µg/m ³	RL µg/m ³	Analyte	Results µg/m ³	RL µg/m ³	Analyte	Results µg/m ³	RL µg/m ³
Vinyl Chloride	U	0.0767		U	0.0767		U	0.0767		U	0.767
1,1-Dichloroethene	U	0.119		U	0.119		U	0.119		U	1.19
trans-1,2-Dichloroethene	U	0.119		U	0.119		U	0.119		U	1.19
1,1-Dichloroethane	U	0.121		U	0.121		U	0.121		U	1.21
cis-1,2-Dichloroethene	U	0.119		U	0.119		U	0.119		U	0.119
1,2-Dichloroethane	U	0.121		0.204	0.121		0.152	0.121		U	1.21
Trichloroethene	U	0.161		U	0.161		U	0.161		U	1.61
Tetrachloroethene	U	0.203		U	0.203		U	0.203		2.06	2.03

Table 1.1 Result of the Analysis for VOC(µg/m³) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank 3/24/2012		0-130-1173 J1-IA2		0-130-1068 MHS-IA6		0-130-1070 MHS-IA7		0-130-1072 MHS-IA8	
Analyte	Results µg/m ³	RL µg/m ³								
Vinyl Chloride	U	0.0767	U	0.767	U	0.0767	U	0.0767	U	0.0767
1,1-Dichloroethene	U	0.119	U	1.19	U	0.119	U	0.119	U	0.119
Methylene Chloride	U	0.104	U	1.04	0.460	0.104	0.530	0.104	0.440	0.104
trans-1,2-Dichloroethene	U	0.119	U	1.19	U	0.119	U	0.119	U	0.119
1,1-Dichloroethane	U	0.121	U	1.21	U	0.121	U	0.121	U	0.121
cis-1,2-Dichloroethene	U	0.119	U	1.19	U	0.119	U	0.119	U	0.119
Chloroform	U	0.146	U	1.46	U	0.146	U	0.146	U	0.146
1,2-Dichloroethane	U	0.121	U	1.21	U	0.121	U	0.121	U	0.121
Benzene	U	0.0958	1.33	0.958	0.403	0.0958	0.585	0.0958	0.435	0.0958
Trichloroethene	U	0.161	U	1.61	U	0.161	U	0.161	U	0.161
Toluene	U	0.113	22.4	1.13	3.11	0.113	4.22	0.113	2.06	0.113
Tetrachloroethene	U	0.203	U	2.03	U	0.203	U	0.203	U	0.203
Ethylbenzene	U	0.130	1.58	1.30	0.555	0.130	0.798	0.130	0.432	0.130
1,2,4-Trimethylbenzene	U	0.147	3.93	1.47	0.500	0.147	0.842	0.147	0.515	0.147

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1073		0-130-1074		0-130-1092		0-130-1094		0-130-1096	
Sample Location	MHS-AMB1		MHS-AMB2		FH-IA		44A-IA		44B-IA	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
Methylene Chloride	0.505	0.104	0.460	0.104	0.497	0.104	0.508	0.104	0.427	0.104
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
Chloroform	U	0.146	U	0.146	U	0.146	0.345	0.146	3.09	0.146
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.121	0.163	0.121
Benzene	0.758	0.0958	0.481	0.0958	0.963	0.0958	1.20	0.0958	1.47	0.0958
Trichloroethene	U	0.161								
Toluene	5.60	0.113	5.09	0.113	4.20	0.113	5.02	0.113	5.39	0.113
Tetrachloroethene	U	0.203	0.558	0.203	U	0.203	U	0.203	U	0.203
Ethylbenzene	0.820	0.130	1.20	0.130	0.693	0.130	0.871	0.130	1.10	0.130
1,2,4-Trimethylbenzene	1.23	0.147	0.713	0.147	1.01	0.147	1.56	0.147	2.72	0.147

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1076		0-130-1078		0-130-1080		0-130-1082		0-130-1084	
Sample Location	CSA-IA1		CSA-IA2		CSA-IA3		CSA-IA4		CSA-IA5	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
1,2-Dichloroethane	U	0.121	U	0.121	0.322	0.121	U	0.121	U	0.121
Trichloroethene	U	0.161	U	0.161	U	0.161	U	0.161	0.242	0.161
Tetrachloroethene	U	0.203	U	0.203	U	0.203	0.204	0.203	0.293	0.203

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1086		0-130-1088		0-130-1089		0-130-1090		0-130-1098	
Sample Location	CSA-IA6		CSA-IA7		CSA-IA8		CSA-AMB		NC-IA	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
1,2-Dichloroethane	U	0.121								
Trichloroethene	U	0.161								
Tetrachloroethene	U	0.203								

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1102	Sample Location	10AF-IA	0-130-1103	10AF-AMB	0-130-1105	12AF-IA	0-130-1107	3AF-IA1	0-130-1108	3AF-IA2
Analyte	Results µg/m3	RL µg/m3		Results µg/m3	RL µg/m3		Results µg/m3	RL µg/m3		Results µg/m3	RL µg/m3
Vinyl Chloride	U	0.0767		U	0.0767		U	0.0767		U	0.0767
1,1-Dichloroethene	U	0.119		U	0.119		U	0.119		U	0.119
trans-1,2-Dichloroethene	U	0.119		U	0.119		U	0.119		U	0.119
1,1-Dichloroethane	U	0.121		U	0.121		U	0.121		U	0.121
cis-1,2-Dichloroethene	U	0.119		U	0.119		U	0.119		U	0.119
1,2-Dichloroethane	U	0.121		U	0.121		U	0.121		U	0.121
Trichloroethene	U	0.161	0.359	U	0.161		U	0.161		U	0.161
Tetrachloroethene	U	0.203		U	0.203		U	0.203		U	0.203

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number 0-130-1110
Sample Location 52H-IA

Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
Vinyl Chloride	U	0.0767
1,1-Dichloroethene	U	0.119
trans-1,2-Dichloroethene	U	0.119
1,1-Dichloroethane	U	0.121
cis-1,2-Dichloroethene	U	0.119
1,2-Dichloroethane	U	0.121
Trichloroethene	U	0.161
Tetrachloroethene	U	0.203

Table 1.1 Result of the Analysis for VOC(µg/m³) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank 3/26/2012		0-130-1129 I15-IA		0-130-1131 J3-IA1		0-130-1132 J3-IA2		0-130-1134 J4-IA	
Analyte	Results µg/m ³	RL µg/m ³								
Vinyl Chloride	U	0.0767	U	0.0767	U	0.0767	U	0.383	U	0.0767
1,1-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.595	U	0.119
Methylene Chloride	U	0.104	0.500	0.104	0.474	0.104	0.825	0.521	0.501	0.104
trans-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.595	U	0.119
1,1-Dichloroethane	U	0.121	U	0.121	U	0.121	U	0.607	U	0.121
cis-1,2-Dichloroethene	U	0.119	U	0.119	U	0.119	U	0.595	U	0.119
Chloroform	U	0.146	U	0.146	1.98	0.146	U	0.732	0.167	0.146
1,2-Dichloroethane	U	0.121	U	0.121	0.178	0.121	U	0.607	0.253	0.121
Benzene	U	0.0958	0.505	0.0958	0.658	0.0958	1.64	0.479	0.666	0.0958
Trichloroethene	U	0.161	U	0.161	U	0.161	U	0.806	U	0.161
Toluene	U	0.113	3.39	0.113	3.93	0.113	30.5	0.565	3.97	0.113
Tetrachloroethene	U	0.203	U	0.203	U	0.203	1.19	1.02	U	0.203
Ethylbenzene	U	0.130	0.480	0.130	0.571	0.130	2.13	0.651	0.601	0.130
1,2,4-Trimethylbenzene	U	0.147	0.664	0.147	1.00	0.147	1.82	0.737	0.854	0.147

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1136 L-IA		0-130-1137 PS-AMB		0-130-1139 PS-IA1		0-130-1141 PS-IA2		Method Blank 3/27/2012	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
Methylene Chloride	0.408	0.104	0.576	0.104	0.508	0.104	0.446	0.104	U	0.104
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
Chloroform	0.261	0.146	U	0.146	U	0.146	0.591	0.146	U	0.146
1,2-Dichloroethane	U	0.121	U	0.121	U	0.121	0.418	0.121	U	0.121
Benzene	0.964	0.0958	0.768	0.0958	0.812	0.0958	1.29	0.0958	U	0.0958
Trichloroethene	U	0.161	U	0.161	U	0.161	0.575	0.161	U	0.161
Toluene	4.42	0.113	8.68	0.113	3.41	0.113	9.60	0.113	U	0.113
Tetrachloroethene	U	0.203	0.460	0.203	U	0.203	U	0.203	U	0.203
Ethylbenzene	0.830	0.130	0.868	0.130	0.441	0.130	0.877	0.130	U	0.130
1,2,4-Trimethylbenzene	2.88	0.147	1.61	0.147	0.765	0.147	1.91	0.147	U	0.147

Table 1.1 Result of the Analysis for VOC($\mu\text{g}/\text{m}^3$) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1100		0-130-1112		0-130-1114		0-130-1116		0-130-1118	
Sample Location	53DC-IA		8AF-IA		55H-IA		53H-IA		53C-IA	
Analyte	Results $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$								
Vinyl Chloride	U	0.0875	U	0.0767	U	0.0767	U	0.0767	U	0.0767
1,1-Dichloroethene	U	0.136	U	0.119	U	0.119	U	0.119	U	0.119
trans-1,2-Dichloroethene	U	0.136	U	0.119	U	0.119	U	0.119	U	0.119
1,1-Dichloroethane	U	0.139	U	0.121	U	0.121	U	0.121	U	0.121
cis-1,2-Dichloroethene	U	0.136	U	0.119	U	0.119	U	0.119	U	0.119
1,2-Dichloroethane	0.340	0.139	U	0.121	U	0.121	U	0.121	U	0.121
Trichloroethene	U	0.184	U	0.161	U	0.161	U	0.161	U	0.161
Tetrachloroethene	0.514	0.232	U	0.203	U	0.203	U	0.203	0.383	0.203

Table 1.1 Result of the Analysis for VOC(µg/m³) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1120 49C-IA		0-130-1122 51C-IA		0-130-1124 46C-IA1		0-130-1125 46C-IA2		0-130-1127 50H-IA	
Analyte	Results µg/m ³	RL µg/m ³								
Vinyl Chloride	U	0.0767								
1,1-Dichloroethene	U	0.119								
trans-1,2-Dichloroethene	U	0.119								
1,1-Dichloroethane	U	0.121								
cis-1,2-Dichloroethene	U	0.119								
1,2-Dichloroethane	U	0.121	U	0.121	0.285	0.121	0.287	0.121	U	0.121
Trichloroethene	U	0.161								
Tetrachloroethene	U	0.203								

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank 3/23/2012		0-130-1142 Trip Blank		0-130-1172 J1-IA1		0-130-1175 J2-IA		0-130-1176 J2-AMB	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Methylene Chloride	U	0.0300	U	0.0300	0.155	0.0300	0.135	0.0300	0.154	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Chloroform	U	0.0300	U	0.0300	0.0415	0.0300	1.70	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Benzene	U	0.0300	0.164	0.0300	0.170	0.0300	0.211	0.0300	0.190	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Toluene	U	0.0300	0.427	0.0300	0.931	0.0300	0.802	0.0300	1.33	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Ethylbenzene	U	0.0300	0.0319	0.0300	0.0924	0.0300	0.0975	0.0300	0.122	0.0300
1,2,4-Trimethylbenzene	U	0.0300	0.0445	0.0300	0.155	0.0300	0.179	0.0300	0.143	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1059		0-130-1060		0-130-1062		0-130-1064		0-130-1066	
Sample Location	MHS-IA1		MHS-IA2		MHS-IA3		MHS-IA4		MHS-IA5	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	0.171	0.0300	0.190	0.0300	0.119	0.0300	0.158	0.0300	0.120	0.0300
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	U	0.0300	U	0.0300	0.0311	0.0300	U	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	0.0346	0.0300	U	0.0300	U	0.0300	U	0.0300
Benzene	2.08	0.0300	1.58	0.0300	0.159	0.0300	0.176	0.0300	0.128	0.0300
Trichloroethene	U	0.0300								
Toluene	10.3	0.0300	9.67	0.0300	0.617	0.0300	2.17	0.0300	0.643	0.0300
Tetrachloroethene	U	0.0300								
Ethylbenzene	1.76	0.0300	1.38	0.0300	0.154	0.0300	0.157	0.0300	0.190	0.0300
1,2,4-Trimethylbenzene	1.44	0.0300	1.12	0.0300	0.140	0.0300	0.131	0.0300	0.0970	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number 0-130-1160
Sample Location I12-IA

Analyte	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300
1,1-Dichloroethene	U	0.0300
Methylene Chloride	0.156	0.0300
trans-1,2-Dichloroethene	U	0.0300
1,1-Dichloroethane	U	0.0300
cis-1,2-Dichloroethene	U	0.0300
Chloroform	0.305	0.0300
1,2-Dichloroethane	0.107	0.0300
Benzene	0.260	0.0300
Trichloroethene	U	0.0300
Toluene	1.18	0.0300
Tetrachloroethene	U	0.0300
Ethylbenzene	0.161	0.0300
1,2,4-Trimethylbenzene	0.230	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1144	0-130-1146	0-130-1148	0-130-1150	0-130-1151			
Sample Location	PFCS-IA1	PFCS-IA2	PFCS-IA3	PFCS-IA4	PFCS-IA5			
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U 0.0300	U 0.0300						
1,1-Dichloroethene	U 0.0300	U 0.0300						
trans-1,2-Dichloroethene	U 0.0300	U 0.0300						
1,1-Dichloroethane	U 0.0300	U 0.0300						
cis-1,2-Dichloroethene	U 0.0300	U 0.0300						
1,2-Dichloroethane	U 0.0300	U 0.0300						
Trichloroethene	U 0.0300	U 0.0300						
Tetrachloroethene	U 0.0300	U 0.0300	U 0.0300	U 0.0300	0.0355	0.0300	U 0.0300	U 0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1153	0-130-1155	0-130-1157	0-130-1158	0-130-1162
Sample Location	PFCS-IA6	PFCS-IA7	PFCS-IA8	PFCS-AMB	15CX-IA1

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.0399	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.292	0.0300
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	0.0447	0.0300	U	0.0300	U	0.0300	U	0.0300	0.261	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	0.0346	0.0300	U	0.0300	U	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.136	0.0300
Tetrachloroethene	U	0.0300								

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1163	0-130-1165	0-130-1167	0-130-1169	0-130-1170
Sample Location	15CX-IA2	115ACX-IA	13CX-IA	CX6-IA	115ACX-AMB

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.300	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.300	U	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.300	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.300	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.300	U	0.0300
1,2-Dichloroethane	U	0.0300	0.0505	0.0300	0.0375	0.0300	U	0.300	U	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.300	U	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	U	0.0300	0.304	0.300	U	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank 3/24/2012		0-130-1173 J1-IA2		0-130-1068 MHS-IA6		0-130-1070 MHS-IA7		0-130-1072 MHS-IA8	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
Methylene Chloride	U	0.0300	U	0.300	0.132	0.0300	0.153	0.0300	0.127	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
Chloroform	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
Benzene	U	0.0300	0.416	0.300	0.126	0.0300	0.183	0.0300	0.136	0.0300
Trichloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
Toluene	U	0.0300	5.94	0.300	0.825	0.0300	1.12	0.0300	0.547	0.0300
Tetrachloroethene	U	0.0300	U	0.300	U	0.0300	U	0.0300	U	0.0300
Ethylbenzene	U	0.0300	0.364	0.300	0.128	0.0300	0.184	0.0300	0.0994	0.0300
1,2,4-Trimethylbenzene	U	0.0300	0.800	0.300	0.102	0.0300	0.171	0.0300	0.105	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1073		0-130-1074		0-130-1092		0-130-1094		0-130-1096	
Sample Location	MHS-AMB1		MHS-AMB2		FH-IA		44A-IA		44B-IA	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	0.145	0.0300	0.132	0.0300	0.143	0.0300	0.146	0.0300	0.123	0.0300
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	U	0.0300	U	0.0300	U	0.0300	0.0708	0.0300	0.632	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.0402	0.0300
Benzene	0.237	0.0300	0.150	0.0300	0.302	0.0300	0.376	0.0300	0.459	0.0300
Trichloroethene	U	0.0300								
Toluene	1.49	0.0300	1.35	0.0300	1.12	0.0300	1.33	0.0300	1.43	0.0300
Tetrachloroethene	U	0.0300	0.0822	0.0300	U	0.0300	U	0.0300	U	0.0300
Ethylbenzene	0.189	0.0300	0.276	0.0300	0.160	0.0300	0.201	0.0300	0.253	0.0300
1,2,4-Trimethylbenzene	0.250	0.0300	0.145	0.0300	0.205	0.0300	0.317	0.0300	0.554	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1076		0-130-1078		0-130-1080		0-130-1082		0-130-1084	
Sample Location	CSA-IA1		CSA-IA2		CSA-IA3		CSA-IA4		CSA-IA5	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
1,2-Dichloroethane	U	0.0300	U	0.0300	0.0795	0.0300	U	0.0300	U	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.0300	0.0450	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	U	0.0300	0.0302	0.0300	0.0432	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1086		0-130-1088		0-130-1089		0-130-1090		0-130-1098	
Sample Location	CSA-IA6		CSA-IA7		CSA-IA8		CSA-AMB		NC-IA	
Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
1,2-Dichloroethane	U	0.0300								
Trichloroethene	U	0.0300								
Tetrachloroethene	U	0.0300								

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1102	0-130-1103	0-130-1105	0-130-1107	0-130-1108
Sample Location	10AF-IA	10AF-AMB	12AF-IA	3AF-IA1	3AF-IA2

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
1,2-Dichloroethane	U	0.0300								
Trichloroethene	U	0.0300	0.0667	0.0300	U	0.0300	U	0.0300	U	0.0300
Tetrachloroethene	U	0.0300								

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number 0-130-1110
Sample Location 52H-IA

Analyte	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300
1,1-Dichloroethene	U	0.0300
trans-1,2-Dichloroethene	U	0.0300
1,1-Dichloroethane	U	0.0300
cis-1,2-Dichloroethene	U	0.0300
1,2-Dichloroethane	U	0.0300
Trichloroethene	U	0.0300
Tetrachloroethene	U	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	Method Blank 3/26/2012		0-130-1129 I15-IA		0-130-1131 J3-IA1		0-130-1132 J3-IA2		0-130-1134 J4-IA	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
1,1-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
Methylene Chloride	U	0.0300	0.144	0.0300	0.136	0.0300	0.238	0.150	0.144	0.0300
trans-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
1,1-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
cis-1,2-Dichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
Chloroform	U	0.0300	U	0.0300	0.406	0.0300	U	0.150	0.0341	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	0.0439	0.0300	U	0.150	0.0626	0.0300
Benzene	U	0.0300	0.158	0.0300	0.206	0.0300	0.514	0.150	0.208	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	U	0.150	U	0.0300
Toluene	U	0.0300	0.901	0.0300	1.04	0.0300	8.09	0.150	1.05	0.0300
Tetrachloroethene	U	0.0300	U	0.0300	U	0.0300	0.175	0.150	U	0.0300
Ethylbenzene	U	0.0300	0.111	0.0300	0.131	0.0300	0.491	0.150	0.139	0.0300
1,2,4-Trimethylbenzene	U	0.0300	0.135	0.0300	0.204	0.0300	0.370	0.150	0.174	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1136		0-130-1137		0-130-1139		0-130-1141		Method Blank
Sample Location	L-IA		PS-AMB		PS-IA1		PS-IA2		3/27/2012

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
Methylene Chloride	0.117	0.0300	0.166	0.0300	0.146	0.0300	0.128	0.0300	U	0.0300
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
Chloroform	0.0534	0.0300	U	0.0300	U	0.0300	0.121	0.0300	U	0.0300
1,2-Dichloroethane	U	0.0300	U	0.0300	U	0.0300	0.103	0.0300	U	0.0300
Benzene	0.302	0.0300	0.240	0.0300	0.254	0.0300	0.403	0.0300	U	0.0300
Trichloroethene	U	0.0300	U	0.0300	U	0.0300	0.107	0.0300	U	0.0300
Toluene	1.17	0.0300	2.30	0.0300	0.904	0.0300	2.55	0.0300	U	0.0300
Tetrachloroethene	U	0.0300	0.0679	0.0300	U	0.0300	U	0.0300	U	0.0300
Ethybenzene	0.191	0.0300	0.200	0.0300	0.102	0.0300	0.202	0.0300	U	0.0300
1,2,4-Trimethylbenzene	0.587	0.0300	0.328	0.0300	0.156	0.0300	0.389	0.0300	U	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1100	Sample Location	0-130-1112	Sample Location	0-130-1114	Sample Location	0-130-1116	Sample Location	0-130-1118	
	53DC-IA		8AF-IA		55H-IA		53H-IA		53C-IA	
Analyte	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv	Results ppbv	RL ppbv
Vinyl Chloride	U	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethene	U	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
trans-1,2-Dichloroethene	U	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,1-Dichloroethane	U	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
cis-1,2-Dichloroethene	U	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
1,2-Dichloroethane	0.0840	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Trichloroethene	U	0.0342	U	0.0300	U	0.0300	U	0.0300	U	0.0300
Tetrachloroethene	0.0757	0.0342	U	0.0300	U	0.0300	U	0.0300	0.0565	0.0300

Table 1.1 Result of the Analysis for VOC (ppbv) in Air
WA# 0-130, Cabo Rojo

Method: SERAS SOP#1814

Sample Number	0-130-1120	0-130-1122	0-130-1124	0-130-1125	0-130-1127
Sample Location	49C-IA	51C-IA	46C-IA1	46C-IA2	50H-IA

Analyte	Results ppbv	RL ppbv								
Vinyl Chloride	U	0.0300								
1,1-Dichloroethene	U	0.0300								
trans-1,2-Dichloroethene	U	0.0300								
1,1-Dichloroethane	U	0.0300								
cis-1,2-Dichloroethene	U	0.0300								
1,2-Dichloroethane	U	0.0300	U	0.0300	0.0704	0.0300	0.0715	0.0300	U	0.0300
Trichloroethene	U	0.0300								
Tetrachloroethene	U	0.0300								

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-173259-0016

Cooler #: 1

Lab: SERAS

W0# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressur e	Stop Pressur e	Step Time
10	0-130-1152	PFCS-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	104	13923	-30	-11.5	3/21/2012 8:54:00 AM
11	0-130-1153	PFCS-IA6	TCE, PCE plus 6	Air ✓	1	SUMMA	184	13766	-30	-3	3/21/2012 8:54:00 AM
12	0-130-1154	PFCS-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	24	13929	-30	-6	3/21/2012 9:04:00 AM
13	0-130-1155	PFCS-IA7	TCE, PCE plus 6	Air ✓	1	SUMMA	11508	13911	-30	-3	3/21/2012 9:04:00 AM
14	0-130-1156	PFCS-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	241	13936	-30	-7.5	3/21/2012 8:59:00 AM
15	0-130-1157	PFCS-IA8	TCE, PCE plus 6	Air ✓	1	SUMMA	14246	13761	-30	-2.5	3/21/2012 8:59:00 AM
16	0-130-1158	PFCS-AMB	TCE, PCE plus 6	Air ✓	1	SUMMA	22	13781	-30	-2.5	3/21/2012 9:07:00 AM
17	0-130-1159	I12-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	12625	13789	-30	-6	3/21/2012 12:05:00 PM
18	0-130-1160	I12-IA	TCE, PCE plus 12	Air	1	SUMMA	200	14016	-30	-5	3/21/2012 12:05:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 1,2,4-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175005-0017

Cooler #: 1

Lab: SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
19	0-130-1161	15CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	256	13782	-30	-7	3/21/2012	1:35:00 PM
20	0-130-1162	15CX-IA1	TCE, PCE plus 6	Air	1	SUMMA	14068	14039	-30	-4	3/21/2012	1:35:00 PM
21	0-130-1163	15CX-IA2	TCE, PCE plus 6	Air	1	SUMMA	14072	13790	-30	-5.5	3/21/2012	1:35:00 PM
22	0-130-1164	115ACX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	23	13988	-30	-6	3/21/2012	1:44:00 PM
23	0-130-1165	115ACX-IA	TCE, PCE plus 6	Air	1	SUMMA	53	13775	-30	-6	3/21/2012	1:44:00 PM
24	0-130-1166	13CX-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	55	13794	-30	-5	3/21/2012	1:50:00 PM
25	0-130-1167	13CX-IA	TCE, PCE plus 6	Air	1	SUMMA	260	14003	-30	-5.5	3/21/2012	1:50:00 PM
26	0-130-1168	CX6-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	14	14011	-30	-5	3/21/2012	1:57:00 PM
27	0-130-1169	CX6-IA	TCE, PCE plus 6	Air	1	SUMMA	181	14024	-30	-30	3/21/2012	1:57:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175125-0018

Cooler #1

Jah. SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
28	0-130-1170	115ACX-AMB	TCE, PCE plus 6	Air	1	SUMMA	70	13946	-30	-7	3/21/2012	1:44:00 PM
29	0-130-1171	J1-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	226	13939	-30	-7	3/21/2012	2:21:00 PM
30	0-130-1172	J1-IA1	TCE, PCE plus 12	Air ✓	1	SUMMA	170	14034	-30	-5	3/21/2012	2:21:00 PM
31	0-130-1173	J1-IA2	TCE, PCE plus 12	Air ✓	1	SUMMA	14223	14021	-30	-30	3/21/2012	2:21:00 PM
32	0-130-1174	J2-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	215	13934	-30	-5.5	3/21/2012	3:06:00 PM
33	0-130-1175	J2-IA	TCE, PCE plus 12	Air ✓	1	SUMMA	71	14048	-30	-6	3/21/2012	3:06:00 PM
34	0-130-1176	J2-AMB	TCE, PCE plus 12	Air ✓	1	SUMMA	81	13788	-30	-6	3/21/2012	3:06:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175226-0019

Cooler #: 1

Lab: SERAS

WO#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop Date	Stop Time	
35	0-130-1058	MHS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	219	13928	-30	-2.5	3/21/2012	8:20:00 AM	
36	0-130-1059	MHS-IA1	TCE, PCE plus 12	Air ✓	1	SUMMA	261	14005	-30	-1.5	3/21/2012	8:20:00 AM	
37	0-130-1060	MHS-IA2	TCE, PCE plus 12	Air ✓	1	SUMMA	14218	13787	-30	-6	3/21/2012	8:20:00 AM	
38	0-130-1061	MHS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	12	13914	-30	-0.5	3/21/2012	8:26:00 AM	
39	0-130-1062	MHS-IA3	TCE, PCE plus 12	Air ✓	1	SUMMA	173	13782	13982	-30	0.5	3/21/2012	8:26:00 AM
40	0-130-1063	MHS-SS3	TCE, PCE plus 12	Soil Gas	1	SUMMA	193	13916	13982	-30	-2.5	3/21/2012	8:33:00 AM
41	0-130-1064	MHS-IA4	TCE, PCE plus 12	Air ✓	1	SUMMA	209	14001	-30	-8	3/21/2012	8:33:00 AM	
42	0-130-1065	MHS-SS4	TCE, PCE plus 12	Soil Gas	1	SUMMA	57	14041	-30	-0.5	3/21/2012	8:38:00 AM	
43	0-130-1066	MHS-IA5	TCE, PCE plus 12	Air ✓	1	SUMMA	231	14019	-30	-2	3/21/2012	8:38:00 AM	

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175316-0020

Cooler # 1

Lab. SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
44	0-130-1067	MHS-SS5	TCE, PCE plus 12	Soil Gas	1	SUMMA	257	13794	-30	-3.5	3/21/2012	8:43:00 AM
45	0-130-1068	MHS-IA6	TCE, PCE plus 12	Air	1	SUMMA	66	13953	-30	-4	3/21/2012	8:43:00 AM
46	0-130-1069	MHS-SS6	TCE, PCE plus 12	Soil Gas	1	SUMMA	14069	13921	-30	-3	3/21/2012	8:52:00 AM
47	0-130-1070	MHS-IA7	TCE, PCE plus 12	Air	1	SUMMA	179	13798	-30	-4.5	3/21/2012	8:52:00 AM
48	0-130-1071	MHS-SS7	TCE, PCE plus 12	Soil Gas	1	SUMMA	224	14037	-30	-1	3/21/2012	8:48:00 AM
49	0-130-1072	MHS-IA8	TCE, PCE plus 12	Air	1	SUMMA	26	13960	-30	-1.5	3/21/2012	8:48:00 AM
50	0-130-1073	MHS-AMB1	TCE, PCE plus 12	Air	1	SUMMA	148	14015	-30	-2	3/21/2012	9:01:00 AM
51	0-130-1074	MHS-AMB2	TCE, PCE plus 12	Air	1	SUMMA	239	13942	-30	-2	3/21/2012	9:05:00 AM
52	0-130-1075	CSA-SS1	TCE, PCE plus 6	Soil Gas	1	SUMMA	263	13933	-30	-4	3/21/2012	9:35:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-175435-0021

Cooler #: 1
Lab: SERAS

WO#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Containler	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
S3	0-130-1076	CSA-IA1	TCE, PCE plus 6	Air	1	SUMMA	5	13784	-30	-7	3/21/2012	9:35:00 AM
S4	0-130-1077	CSA-SS2	TCE, PCE plus 6	Soil Gas	1	SUMMA	152	13948	-30	-3.5	3/21/2012	9:39:00 AM
S5	0-130-1078	CSA-IA2	TCE, PCE plus 6	Air	1	SUMMA	178	13802	-30	-3	3/21/2012	9:39:00 AM
S6	0-130-1079	CSA-SS3	TCE, PCE plus 6	Soil Gas	1	SUMMA	1131	14004	-30	-1	3/21/2012	9:44:00 AM
S7	0-130-1080	CSA-IA3	TCE, PCE plus 6	Air	1	SUMMA	68	14020	-30	-3	3/21/2012	9:44:00 AM
S8	0-130-1081	CSA-SS4	TCE, PCE plus 6	Soil Gas	1	SUMMA	79	14035	-30	-3	3/21/2012	9:52:00 AM
S9	0-130-1082	CSA-IA4	TCE, PCE plus 6	Air	1	SUMMA	147	13912	-30	-0.5	3/21/2012	9:52:00 AM
S0	0-130-1083	CSA-SS5	TCE, PCE plus 6	Soil Gas	1	SUMMA	34	13785	-30	-2	3/21/2012	9:57:00 AM
S1	0-130-1084	CSA-IA5	TCE, PCE plus 6	Air	1	SUMMA	37	13795	-30	-3.5	3/21/2012	9:57:00 AM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175708-0022

Cooler #: 1

Lab. SERAS

W0#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
62	0-130-1085	CSA-SS6	TCE, PCE plus 6	Soil Gas	1	SUMMA	213	13922	-30	-3	3/21/2012	10:02:00 AM
63	0-130-1086	CSA-IA6	TCE, PCE plus 6	Air	1	SUMMA	137	13776	-30	-3	3/21/2012	10:02:00 AM
64	0-130-1087	CSA-SS7	TCE, PCE plus 6	Soil Gas	1	SUMMA	159	14050	-30	-2.5	3/21/2012	10:07:00 AM
65	0-130-1088	CSA-IA7	TCE, PCE plus 6	Air	1	SUMMA	75	13777	-30	-3	3/21/2012	10:07:00 AM
66	0-130-1089	CSA-IA8	TCE, PCE plus 6	Air	1	SUMMA	242	13943	-30	-1	3/21/2012	10:07:00 AM
67	0-130-1090	CSA-AMB	TCE, PCE plus 6	Air	1	SUMMA	238	13765	-30	-3	3/21/2012	9:48:00 AM
68	0-130-1091	FH-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	118	13767	-30	-4	3/21/2012	10:48:00 AM
69	0-130-1092	FH-IA	TCE, PCE plus 12	Air	1	SUMMA	103	13918	-30	-3	3/21/2012	10:48:00 AM
70	0-130-1093	44A-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	186	13937	-30	-3.5	3/21/2012	10:51:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

Cabo Rojo

Contact Name: Michael Cartwright

Contact Phone: 732-321-4284

No: 2-032112-175900-0023

Cooler #: 1

Lab: SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat e	Stop_Time
71	0-130-1094	44A-IA	TCE, PCE plus 12	Air	1	SUMMA	222	14023	-30	-2.5	3/21/2012	10:51:00 AM
72	0-130-1095	44B-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	119	13935	-30	-4.5	3/21/2012	10:56:00 AM
73	0-130-1096	44B-IA	TCE, PCE plus 12	Air	1	SUMMA	47	13764	-30	-2	3/21/2012	10:56:00 AM
74	0-130-1097	NC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	107	14038	-30	-4.5	3/21/2012	11:09:00 AM
75	0-130-1098	NC-IA	TCE, PCE plus 6	Air	1	SUMMA	206	14012	-30	-3	3/21/2012	11:09:00 AM
76	0-130-1099	53DC-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	157	13991	-30	-4	3/21/2012	11:17:00 AM
77	0-130-1100	53DC-IA	TCE, PCE plus 6	Air	1	SUMMA	43	13793	-30	-8	3/21/2012	11:17:00 AM
78	0-130-1101	10AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	255	13915	-30	-4.5	3/21/2012	11:27:00 AM
79	0-130-1102	10AF-IA	TCE, PCE plus 6	Air	1	SUMMA	59	13986	-30	-3	3/21/2012	11:27:00 AM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180018-0024

Cooler #: 1

Jahy SERAS

WO#R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressu re	Stop Pressu re	Stop_Dat	Stop_Time
80	0-130-1103	10AF-AMB	TCE, PCE plus 6	Air	1	SUMMA	14251	13779	-30	-2.5	3/21/2012	11:27:00 AM
81	0-130-1104	12AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	130	13941	-30	-4	3/21/2012	11:33:00 AM
82	0-130-1105	12AF-IA	TCE, PCE plus 6	Air	1	SUMMA	25	13993	-30	-3.5	3/21/2012	11:33:00 AM
83	0-130-1106	3AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	243	13925	-30	-3.5	3/21/2012	11:43:00 AM
84	0-130-1107	3AF-IA1	TCE, PCE plus 6	Air	1	SUMMA	10	13983	-30	-3	3/21/2012	11:43:00 AM
85	0-130-1108	3AF-IA2	TCE, PCE plus 6	Air	1	SUMMA	191	13996	-30	-2.5	3/21/2012	11:43:00 AM
86	0-130-1109	52H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	63	13778	-30	-3.5	3/21/2012	11:54:00 AM
87	0-130-1110	52H-IA	TCE, PCE plus 6	Air	1	SUMMA	14220	13954	-30	-0.5	3/21/2012	11:54:00 AM
88	0-130-1111	8AF-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	97	14026	-30	-4	3/21/2012	11:49:00 AM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180128-0025

Cooler # 1

Lab SERAS

WO# R203016

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Date	Stop_Time
89	0-130-1112	8AF-IA	TCE, PCE plus 6	Air	1	SUMMA	156	13792	-30	-3.5	3/21/2012	11:49:00 AM
90	0-130-1113	55H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	65	13762	-30	-4	3/21/2012	12:03:00 PM
91	0-130-1114	55H-IA	TCE, PCE plus 6	Air	1	SUMMA	8	13801	-30	-2.5	3/21/2012	12:03:00 PM
92	0-130-1115	53H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	192	13998	-30	-1	3/21/2012	12:10:00 PM
93	0-130-1116	53H-IA	TCE, PCE plus 6	Air	1	SUMMA	14070	13995 3/21/2012 13999	-30	-3	3/21/2012	12:10:00 PM
94	0-130-1117	53C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	7	14010	-30	-4	3/21/2012	3:41:00 PM
95	0-130-1118	53C-IA	TCE, PCE plus 6	Air	1	SUMMA	280	13919	-30	-5	3/21/2012	3:41:00 PM
96	0-130-1119	49C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	203	13952	-30	-5	3/21/2012	1:36:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylen Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180247-0026

Cooler #: 1

Lab: SERAS

R203017
WO# ~~R203016~~ M 3/23/12

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
0-130-1120	49C-IA	TCE, PCE plus 6	Air	1	SUMMA	216	14044	-30	-4	3/21/2012	1:36:00 PM	
0-130-1121	51C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	101	13939	-30	-4.5	3/21/2012	1:52:00 PM	
0-130-1122	51C-IA	TCE, PCE plus 6	Air	1	SUMMA	180	13769	-30	-3	3/21/2012	1:52:00 PM	
0-130-1123	46C-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	264	13917	-30	-4.5	3/21/2012	1:45:00 PM	
0-130-1124	46C-IA1	TCE, PCE plus 6	Air	1	SUMMA	36	13962	-30	-2	3/21/2012	1:45:00 PM	
0-130-1125	46C-IA2	TCE, PCE plus 6	Air	1	SUMMA	150	13997	-30	-2	3/21/2012	1:45:00 PM	
0-130-1126	50H-SS	TCE, PCE plus 6	Soil Gas	1	SUMMA	13	14008	-30	-5	3/21/2012	1:59:00 PM	
0-130-1127	50H-IA	TCE, PCE plus 6	Air	1	SUMMA	27	14013	-30	-2	3/21/2012	1:59:00 PM	

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180403-0027

Cooler #: 1

Lab SERAS

WO#R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat e	Stop_Time
09	0-130-1128	I15-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	40	13920	-30	-4	3/21/2012	2:22:00 PM
10	0-130-1129	I15-IA	TCE, PCE plus 12	Air	1	SUMMA	211	14030	-30	-3.5	3/21/2012	2:22:00 PM
11	0-130-1130	J3-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	176	13949	-30	-2.7	3/21/2012	2:28:00 PM
12	0-130-1131	J3-IA1	TCE, PCE plus 12	Air	1	SUMMA	182	14040	-30	-4.5	3/21/2012	2:28:00 PM
13	0-130-1132	J3-IA2	TCE, PCE plus 12	Air	1	SUMMA	14224	13768	-30	-2.9	3/21/2012	2:28:00 PM
14	0-130-1133	J4-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	194	13994	-30	-5.5	3/21/2012	2:36:00 PM
15	0-130-1134	J4-IA	TCE, PCE plus 12	Air	1	SUMMA	274	14018	-30	-4	3/21/2012	2:36:00 PM
16	0-130-1135	L-SS	TCE, PCE plus 12	Soil Gas	1	SUMMA	96	13995	-30	-5.5	3/21/2012	2:46:00 PM

SPECIAL INSTRUCTIONS: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

USEPA

CHAIN OF CUSTODY RECORD

No: 2-032112-180503-0028

Cooler #: 1

Lab: SERAS

WO# R203017

Lab #	Sample #	Location	Analyses	Matrix	Numb Cont	Container	Pump #	OrificeID	Start Pressure	Stop Pressure	Stop_Dat	Stop_Time
17	0-130-1136	L-IA	TCE, PCE plus 12	Air	1	SUMMA	139	13985	-30	-4.5	3/21/2012	2:46:00 PM
18	0-130-1137	PS-AMB	TCE, PCE plus 12	Air	1	SUMMA	78	13760	-30	-3.5	3/21/2012	3:00:00 PM
19	0-130-1138	PS-SS1	TCE, PCE plus 12	Soil Gas	1	SUMMA	120	14000	-30	-5	3/21/2012	2:51:00 PM
20	0-130-1139	PS-IA1	TCE, PCE plus 12	Air	1	SUMMA	62	14027	-30	-3	3/21/2012	2:51:00 PM
21	0-130-1140	PS-SS2	TCE, PCE plus 12	Soil Gas	1	SUMMA	32	13947	-30	-5.5	3/21/2012	2:56:00 PM
22	0-130-1141	PS-IA2	TCE, PCE plus 12	Air	1	SUMMA	236	13927	-30	-4.5	3/21/2012	2:56:00 PM
23	0-130-1142	Trip Blank	TCE, PCE plus 12	Air	1	SUMMA	14249	na	-30	-30	3/21/2012	4:36:00 PM

Special Instructions: Analyze per PWA. PCE, TCE Plus 6 adds 11DCE, 11DCA, 12DCA, cis12DCE, trans12DCE and VCI. Plus 12 includes Plus 6 and Chloroform, Benzene, Toluene, Ethyl Benzene, Methylene Chloride and 124-trimethylbenzene

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #